

**Abstract**

The present invention relates to the use of anticoagulant agents,  
5 and in particular of PEG-hirudin, for treating individuals with  
extracorporeal circulation for prophylaxis of vascular  
complications after the extracorporeal circulation. It is thus  
possible in particular to treat individuals with chronic renal  
insufficiency requiring regular hemodialysis and moreover prevent  
10 vascular complications which conventionally result in a high  
morbidity and mortality rate for dialysis patients treated  
longer-term.

**15****20****25****30****35****40****45**